SCRIPPS LABORATORIES

Technical Brief

NT-proBNP, Recombinant

N-Terminal proB-type natriuretic peptide (NT-proBNP) is a well-established cardiac biomarker for the diagnosis, risk stratification, and monitoring of cardiovascular disease. Natriuretic peptides are hormones found in several tissues throughout the body. In the heart they are produced by cardiomyocytes and function to regulate body fluid homeostasis and control the degree to which blood vessels constrict or dilate, influencing blood flow and blood pressure. Blood levels of natriuretic peptides are elevated in response to myocardial wall stress, such as that caused by hypertension, cardiovascular disease, heart failure, and other instances of cardiac dysfunction.

The human heart produces two natriuretic peptides: atrial, or A-type (ANP), and brain, or B-type (BNP). Both are synthesized as pre-prohormones, which undergo cleavage to yield the active peptides, ANP and BNP, and two inactive fragments, NT-proANP and NT-proBNP. Although both natriuretic peptides are produced and released in response to mycocardial stretch, it is BNP and NT-proBNP that are more useful in cardiovascular medicine.

Numerous studies show NT-proBNP accurately diagnoses heart failure. In addition, it has value in predicting future episodes of acute coronary syndromes, pulmonary embolism, and heart failure. Studies also show it is useful in monitoring cardiac patients' response to therapy, with changes in NT-proBNP levels correlating strongly with rates of heart failure hospitalizations and cardiovascular death.[1,2,3,4,5]

SDS-PAGE

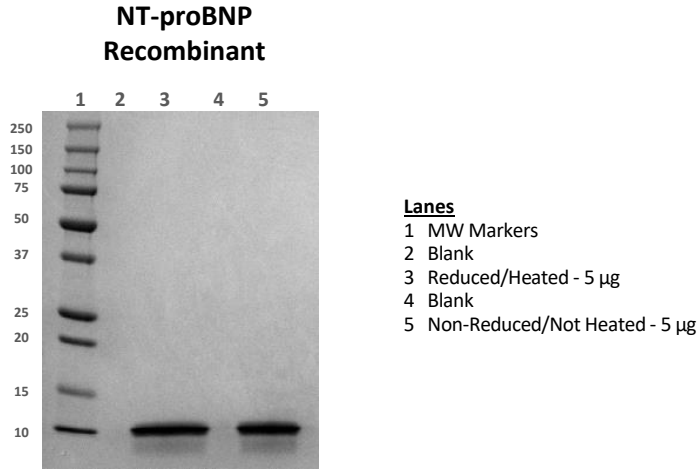

Figure 1. SDS-PAGE of recombinant NT-proBNP under reduced/heated (lane 3) and non-reduced/not heated (lane 5) conditions.

Ordering Information

Product Description	Cat. No.	Part No.	
NT-proBNP, Recombinant	B0414	90625	*View B0414-90625*

* * * * * * * * * * * * *

Purified NT-proBNP from Scripps Laboratories is suitable for research use or the development of a diagnostic assay. Purity is ≥95% and as can be seen in Figure 1, the material runs close to its predicted MW of 8.5 kDa.[6]

NT-proBNP is in stock and ready for evaluation. Use the link above to learn more.

References

1. Ibrahim, Ahmad, Abbas, et al. Cureus, 2025; 17(3): e81264.

2. Arshad, Laraib, Nikeeta, et al. Cureus, 2025; 17(6): e85242.

3. Cunningham, Myhre. J. Amer.Coll. Cardiol. 2021; 78(3): 1333-1335.

4. Ala-Kopsala, Moilanen, Rysa, et al. Clin. Chem. 2010; 56(12): 1822-1829.

5. Corteville, Bibbins-Domingo, Wu, et al. Arch. Intern. Med. 2007; 167(5): 483-489.

6. Cao, Jia, Zhu. Int. J. Mol. Sci. 2019; 20: 1820

6838 Flanders Drive, San Diego, CA 92121-2904 USA | Tel: (+1) 858.546.5800
Fax: (+1) 858.546.5812 | scrippslabs.com | contact@scrippslabs.com